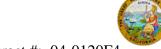
### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

# WELDING INSPECTION REPORT

Resident Engineer: Casey, William **Report No:** WIR-026447

Address: 333 Burma Road **Date Inspected:** 03-Oct-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure Prime Contractor: American Bridge/Fluor Enterprises, a JV **OSM Departure Time:** 1730 Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job Site

**CWI Name:** Salvador Merino and John Paglier WI Present: Yes No

**Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** N/A No

Yes **Delayed / Cancelled:** 

34-0006 **Bridge No: Component: SAS** Tower

#### **Summary of Items Observed:**

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At Tower Base Elevation Electro Slag Welding (ESW) T-joint #W-045 location S-045 location 'G' (face B), QA randomly ABF welder Richard Garcia continuing to perform 3G SMAW cover welding repair due to excessive grinding on the visually noted overlap. The welder was observed welding in the 3G (vertical) position utilizing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode implementing welding procedure ABF-WPS-D15-1000-Repair Rev. 2. The excavation was previously tested using Magnetic Particle Testing (MT) by ABF QC William Sherwood and randomly verified by this QA with positive result. The repair excavation and the adjacent base metal were preheated to more than 300°F using the propylene gas torch. During the shift, ABF QC Salvador Merino was noted monitoring the welder. Measured welding parameter during welding was 135 amperes on a 1/8" diameter E7018H4R electrode. During the shift, weld cover repair at ESW location 'G' elevation 9 to 13 meters was completed and the has moved to elevation 0 to 9 meters of the same ESW location.

At Tower Base Elevation Electro Slag Welding (ESW) T-joint W-044 location 'D' (face A), QA randomly ABF welder Jeremy Dolman continuing to perform 3G SMAW cover welding repair due to excessive grinding on the visually noted overlap. The welder was observed welding in the 3G (vertical) position utilizing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode implementing welding procedure ABF-WPS-D15-1000-Repair Rev. 2. The excavation was previously tested using Magnetic Particle Testing (MT) by ABF QC John Pagliero and randomly verified by this QA with positive result. The repair location and the

## WELDING INSPECTION REPORT

(Continued Page 2 of 2)

adjacent base metal were preheated to more than 300°F using the propylene gas torch. During the shift, ABF QC John Pagliero was noted monitoring the welder. Measured welding parameter during welding was 120 amperes on a 1/8" diameter E7018H4R electrode. Before the end of the shift, repair welding at elevation 9 to 13 meters location mentioned above was completed and the welder has moved to another ESW location 'E' (face B) wherein he excavated an Ultrasonic Testing (UT) detected defect of the welded ESW. The excavation was located at Y=800mm and was preheated to more than 250°F prior carbon air arc gouging. Gouging on the excavation was still continuing at the end of the shift and should remain tomorrow.

At the request of Quality Control Field Supervisor, Bonifacio Daquinag, QA has randomly verified the QC VT/MT of the ESW welding of two (2) various locations at 9 to 13 meters elevation. The QA verification was performed to verify that the welding and the VT/MT inspection performed by the QC inspector meet the requirements of the contract documents. At the conclusion of the QA verification it appeared that the weld and the QC inspection complied with the contract documents.

**ESW Location** Remarks

- 1. S-045 location 'G' (face B) Deemed acceptable.
- 2. W-044 location 'D' (face A) Deemed acceptable.





## **Summary of Conversations:**

No significant conversation ocurred today.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Lizardo, Joselito	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer